

REMARKS

Claims 1-12, 14-25, 27-38 and 40-42 were pending in the Application. In the foregoing amendments, claims 1, 6-8, 11, 14, 19-21, 27, 32-35, and 37 have been amended; claims 5, 18, and 31 have been cancelled without prejudice and disclaimer to the subject matters disclosed therein; and new claims 43-46 have been added. Support for these amendments can be found in the specification and claims of the application as filed. No new matter has been added by these amendments.

Applicants respectfully request entry of the foregoing amendments and reconsideration of the application in light of the amendments above and the remarks below.

Claim Rejections under 35 U.S.C. § 112

The Office Action rejected claims 1, 14, and 27 (and claims dependent therefrom) under 35 U.S.C. § 112, first paragraph. In the forgoing amendments, claims 1, 14, and 27 have been amended, thereby obviating these rejections.

Claim Rejections under 35 U.S.C. § 103(a)

The Office Action rejected claims 1-7, 14-20, 27-33, and 35-38 under 35 U.S.C. § 103(a) as allegedly being obvious over Schulist (6,542,558) in view of Wang (6,526,531). Applicants respectfully traverse these rejections.

In the forgoing amendments, independent claim 1, 14, and 27 have been amended to explicitly incorporate the limitations of claims 5, 18, and 31, respectively. Applicants submit that the amended claims 1, 14, and 27 are patentable over the cited references, for at least the reasons stated below.

Schulist discloses an architecture of a receiver, including an antenna, a demodulation unit, a turbo decoder, an SNR adoption unit, and a power control system. The power control system further includes an SNR estimator, a power controller, and a reference SNR module.

Schulist states that unlike the conventional receiver architecture, the turbo decoder in the aforementioned receiver relies on a **constant or quasi-constant SNR value** to support the turbo decoding process. The constant or quasi-constant SNR value is derived from the reference SNR

module generated by the reference SNR module. More specifically, the reference SNR is forwarded to the SNR adoption unit, which modifies the reference SNR based on one or more factors. The modified SNR is then forwarded to the turbo encoder, which uses the quasi-constant, modified SNR to generate the decoded sequence (see, col. 5, line 54 to col. 6, line 10).

Wang discloses a method of **early termination of iterative decoding**. According to Wang, early termination of decoding may occur prior to an intermediate iteration threshold of M of iterations when the parity check value of the decoded frame is equivalent to the parity check value calculated from the error detection information. Early termination of decoding may also occur when a difference in decoding error between frames is either i) below a minimum error distance threshold or ii) no longer monotonically decreasing (see FIG. 4; col. 7, line 51 to col. 8, line 53).

In contrast, embodiments and claims of the present application relate to determining when to **begin decoding** in a communication system, so that **early termination of current packet transmission** can be made, thereby reducing power consumption of the decoder. Neither Schulist or Wang, alone or in combination, teaches or suggests such. For example, neither Schulist nor Wang, along or in combination, teaches or suggests “estimating a quality metric of a channel associated with a segment of a received signal; determining a quality metric threshold; determining a real-valued parameter Δ_0 ; defining an interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold; and decoding the segment when the estimated quality metric is outside of the interval,” as recited in independent claim 1, 14, or 27 (emphasis added). For at least these reasons, Applicants submit that independent claims 1, 14, and 27 are allowable over the cited references. Applicants respectfully request that the rejections of these claims be withdrawn.

Claim 8, which was objected to in the Office Action, has been rewritten in independent form to explicitly incorporate the limitations of its original base claim (claim 1), and is therefore allowable.

Claim 21, which was objected to in the Office Action, has been rewritten in independent form to explicitly incorporate the limitations of its original base claim (claim 14), and is therefore allowable.

Claim 34, which was objected to in the Office Action, has been rewritten in independent form to explicitly incorporate the limitations of its original base claim (claim 27), and is therefore allowable.

Claims 2-4, 6-7, 9-12, 15-17, 19-20, 22-25, 28-30, and 32-33, 35-38, and 40-42 each depend respectively from one of independent claims 1, 8, 14, 21, 27, and 34, and therefore are allowable as well. Applicants respectfully request that the rejections of these claims be withdrawn.

New Claims

New claims 43-46 each depend respectively from one of independent claims 21 and 34, and therefore are allowable as well.

Allowable Subject Matter

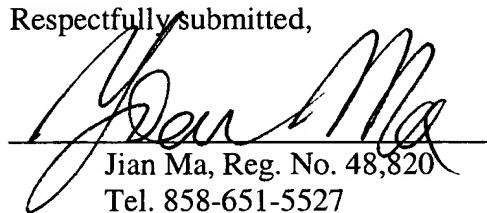
In the Office Action, claims 8-12, 21-25, and 34 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants thank the Examiner for the indication of allowable subject matter.

A statement of reasons for claims 8-12, 21-25, and 34 being allowable was set forth by the Examiner in the Office Action. While Applicants agree that these claims are allowable for at least the reasons set forth in the Examiner's statement, Applicants submit that the invention as recited by the claims and as described in the present application is patentable over the art of record for reasons in addition to those listed in the Examiner's statement. Accordingly, Applicants reserve the right to pursue claims of different scope from those in the present application.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that this application is now in condition for allowance. Accordingly, reconsideration and allowance are respectfully requested. Should any issues remain unresolved which the Examiner believes could be resolved in a telephone interview, the Examiner is requested to telephone the Applicant's undersigned attorney.

Respectfully submitted,



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